



## Seminar/Talk

# Understanding adaptation in an infinitesimal world

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Host:

The best-understood examples of adaptation involve one or a few alleles with major effects on phenotype - for example, butterfly wing patterns, or insecticide resistance. Yet, most traits have a complex genetic basis, and respond to selection through variation at very many loci. At least in the short term, in sexual populations, quantitative genetic variation is accurately described by the infinitesimal model, under which the breeding value of offspring follows a normal distribution, with a variance that is independent of the parents values. This implies that individual alleles have effects small enough that random drift dominates selection, so that the genome evolves almost neutrally. In this infinitesimal regime, adaptation is most efficient, and yet makes its genetic basis inaccessible.

**Friday, November 12, 2021 02:00pm - 03:00pm**

Mondi Seminar Room 3, Central Building



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